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LS: Entry 1 of 1

File: USPT

Sep 16, 1997

US-PAT-NO: 5668005

DOCUMENT-IDENTIFIER: US 5668005 A

TITLE: Cloned genes encoding reverse transcriptase lacking RNASE H activity

DATE-ISSUED: September 16, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/69.1, 435/69.7, 435/810,  
435/91.51, 536/23.2, 536/23.4

## CLAIMS:

What is claimed is:

1. An isolated DNA molecule comprising a nucleotide sequence encoding a polypeptide having DNA polymerase activity and substantially no RNaseH activity, wherein said nucleotide sequence is derived from a Moloney murine leukemia virus (M-MLV) nucleotide sequence.
2. The isolated DNA molecule of claim 1, wherein said polypeptide may be used for the preparation of full length cDNA.
3. The isolated DNA molecule of claim 1, wherein said nucleotide sequence is derived from a reverse transcriptase nucleotide sequence.
4. The isolated DNA molecule of claim 1, wherein said nucleotide sequence is an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.
5. A vector comprising the DNA molecule of any one of claims 1-4.
6. A host cell comprising the DNA molecule of any one of claims 1-4.
7. A host cell comprising the vector of claim 5.
8. A method for preparing a DNA molecule, said method comprising
  - (a) mixing an mRNA template with a polypeptide having DNA polymerase activity and substantially no RNaseH activity, wherein said polypeptide is encoded by a nucleotide sequence derived from a Moloney murine leukemia virus (M-MLV) nucleotide sequence; and
  - (b) incubating said mixture under conditions sufficient to make a first DNA molecule complementary to said mRNA template.
9. The method of claim 8, wherein said first DNA molecule is full length cDNA.
10. The method of claim 8, further comprising incubating said first DNA molecule under conditions sufficient to make a second DNA molecule complementary to said first DNA molecule.

11. The method of claim 10, wherein said first and second DNA molecules form a double stranded DNA molecule.
12. The method of claim 11, wherein said double stranded DNA molecule is full length cDNA.
13. The method of claim 8, wherein said polypeptide is encoded by a nucleotide sequence which is derived from a reverse transcriptase nucleotide sequence.
14. The method of claim 13, further comprising incubating said first DNA molecule under conditions sufficient to make a second DNA molecule complementary to said first DNA molecule.
15. The method of claim 14, wherein said first and second DNA molecules form a double stranded DNA molecule.
16. The method of claim 15, wherein said double stranded DNA molecule is full length cDNA.
17. The method of claim 8, wherein said polypeptide is encoded by an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.
18. The method of claim 17, further comprising incubating said first DNA molecule under conditions sufficient to make a second DNA molecule complementary to said first DNA molecule.
19. The method of claim 18, wherein said first and second DNA molecules form a double stranded DNA molecule.
20. The method of claim 19, wherein said double stranded DNA molecule is full length cDNA.
21. A polypeptide having DNA polymerase activity and substantially no RNaseH activity, wherein said polypeptide is encoded by a nucleotide sequence derived from a Moloney murine leukemia virus (M-MLV) nucleotide sequence.
22. The polypeptide of claim 21, wherein said polypeptide may be used for the preparation of full length cDNA.
23. The polypeptide of claim 21, wherein said polypeptide is encoded by nucleotide sequence derived from a reverse transcriptase nucleotide sequence.
24. The polypeptide of claim 21, wherein said polypeptide is encoded by an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.
25. A kit for the preparation of cDNA, said kit comprising a container containing the polypeptide of claim 21.
26. The kit of claim 25, further comprising one or more additional containers selected from the group consisting of:
  - (a) a container containing one or more nucleoside triphosphates,
  - (b) a container containing an oligo (dT) primer, and
  - (c) a container containing a buffer suitable for use in making a cDNA.
27. The kit of claim 25, wherein said polypeptide may be used for the preparation of full length cDNA.
28. The kit of claim 25, wherein said polypeptide is encoded by a nucleotide sequence derived from a reverse transcriptase nucleotide sequence.
29. The kit of claim 25, wherein said polypeptide is encoded by an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.

30. A method for producing a polypeptide having DNA polymerase activity and substantially no RNaseH activity, said method comprising

(a) culturing the host cell of claim 6 under conditions sufficient to produce said polypeptide; and

(b) isolating said polypeptide.

31. The method of claim 30, wherein said polypeptide may be used for the preparation of full length cDNA.

32. The method of claim 30, wherein said polypeptide is encoded by a nucleotide sequence derived from a reverse transcriptase nucleotide sequence.

33. The method of claim 30, wherein said polypeptide is encoded by an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.

34. A method for producing a polypeptide having DNA polymerase activity and substantially no RNaseH activity, said method comprising

(a) culturing the host cell of claim 7 under conditions sufficient to produce said polypeptide; and

(b) isolating said polypeptide.

35. The method of claim 34, wherein said polypeptide may be used for the preparation of full length cDNA.

36. The method of claim 34, wherein said polypeptide is encoded by a nucleotide sequence derived from a reverse transcriptase nucleotide sequence.

37. The method of claim 34, wherein said polypeptide is encoded by an M-MLV reverse transcriptase nucleotide sequence that has been modified so that the encoded polypeptide has substantially no RNaseH activity.

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L11

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DB=USPT; PLUR=YES; OP=ADJ

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<u>L9</u>	L8 same (avian sarcoma-leukosis virus or aslv or rous sarcoma virus or rsv or avian myeloblastosis virus or amv)	1734	<u>L9</u>
<u>L8</u>	reverse transcriptase	10732	<u>L8</u>
<u>L7</u>	('5244797')[PN]	1	<u>L7</u>
<u>L6</u>	('5405776')[PN]	1	<u>L6</u>
<u>L5</u>	('5668005')[PN]	1	<u>L5</u>
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<u>L2</u>	('6603608')[PN]	0	<u>L2</u>
<u>L1</u>	('60603608')[PN]	0	<u>L1</u>

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 10 of 42 returned.** **1. Document ID: US 6331621 B1**

L11: Entry 1 of 42

File: USPT

Dec 18, 2001

US-PAT-NO: 6331621

DOCUMENT-IDENTIFIER: US 6331621 B1

TITLE: Isolated nucleic acid molecules which encode activin-receptor like kinases, expression vectors and cells containing these

DATE-ISSUED: December 18, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Miyazono; Kohei	Uppsala			SEX
ten Dijke; Peter	Uppsala			SEX
Franzen; Petra	Uppsala			SEX
Yamashita; Hidetoshi	Uppsala			SEX
Heldin; Carl-Henrik	Uppsala			SEX

US-CL-CURRENT: 536/23.2; 435/194, 435/252.1, 435/320.1, 435/325, 435/69.1, 530/350,  
530/357

## ABSTRACT:

The invention involves nucleic acid molecules which encode activin like kinases, expression vectors, and cell lines.

10 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KWMC</a>
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 **2. Document ID: US 6326469 B1**

L11: Entry 2 of 42

File: USPT

Dec 4, 2001

US-PAT-NO: 6326469

DOCUMENT-IDENTIFIER: US 6326469 B1

TITLE: Megakaryocytic protein tyrosine kinases

DATE-ISSUED: December 4, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ullrich; Axel	Portola Valley	CA		
Gishizky; Mikhail	Palo Alto	CA		
Sures; Irmgard	Munich			DEX

US-CL-CURRENT: 530/350; 435/194, 435/69.1, 435/69.7

**ABSTRACT:**

The present invention relates to novel cytoplasmic tyrosine kinases isolated from megakaryocytes (megakaryocyte kinases or MKKs) which are involved in cellular signal transduction pathways and to the use of these novel proteins in the diagnosis and treatment of disease. The present invention further relates to specific megakaryocyte kinases, designated MKK1, MKK2 and MKK3, and their use as diagnostic and therapeutic agents.

11 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC
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**3. Document ID: US 6312934 B1**

L11: Entry 3 of 42

File: USPT

Nov 6, 2001

US-PAT-NO: 6312934

DOCUMENT-IDENTIFIER: US 6312934 B1

TITLE: Human MEKK proteins, corresponding nucleic acid molecules, and uses therefor

DATE-ISSUED: November 6, 2001

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Johnson; Gary L.	Boulder	CO		

US-CL-CURRENT: 435/194; 435/252.3, 435/320.1, 435/325, 435/6, 536/23.2

**ABSTRACT:**

Isolated nucleic acid molecules encoding human MEKK proteins, and isolated MEKK proteins, are provided. The invention further provides antisense nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and nonhuman transgenic animals carrying a human MEKK transgene. The invention further provides human MEKK fusion proteins and anti-human MEKK antibodies. Methods of using the human MEKK proteins and nucleic acid molecules of the invention are also disclosed, including methods for detecting human MEKK activity in a biological sample, methods of modulating human MEKK activity in a cell, and methods for identifying agents that modulate the activity of human MEKK.

29 Claims, 35 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 35

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC
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4. Document ID: US 6242235 B1

L11: Entry 4 of 42

File: USPT

Jun 5, 2001

US-PAT-NO: 6242235

DOCUMENT-IDENTIFIER: US 6242235 B1

TITLE: Polymerase stabilization by polyethoxylated amine surfactants

DATE-ISSUED: June 5, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shultz; John W.	Verona	WI		
Huang; Fen	Madison	WI		

US-CL-CURRENT: 435/194; 435/188

## ABSTRACT:

The present invention provides methods and compositions for protein stabilization, particularly the stabilization of polymerases in aqueous solutions with cationic surfactants. The present invention further provides cationic surfactants, including polyethoxylated amines, that stabilize thermostable and thermolabile enzymes in solution. These surfactants stabilize the activity of various enzymes, including thermostable DNA polymerases, thermolabile DNA polymerases and reverse transcriptases.

23 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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 5. Document ID: US 6207814 B1

L11: Entry 5 of 42

File: USPT

Mar 27, 2001

US-PAT-NO: 6207814

DOCUMENT-IDENTIFIER: US 6207814 B1

TITLE: Activin receptor-like kinases, ALK-3 and ALK-6, and nucleic acids encoding them

DATE-ISSUED: March 27, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Miyazono; Kohei	Uppsala			SEX
ten Dijke; Peter	Uppsala			SEX
Franzen; Petra	Uppsala			SEX
Yamashita; Hidetoshi	Uppsala			SEX
Heldin; Carl-Henrik	Uppsala			SEX

US-CL-CURRENT: 536/23.5; 435/194, 530/350

## ABSTRACT:

The invention relates to two members of the receptor family referred to as activin-like kinases. These two members are referred to as ALK-3 and ALK-6. The proteins have activin/TGF-.beta. type I receptor functionality, and may have a serine/threonine

kinase domain, a DFKSRN or DLKSKN sequence in subdomain V1B, and/or a GTKRYM sequence in subdomain VIII.

5 Claims, 14 Drawing figures  
Exemplary Claim Number: 1,3  
Number of Drawing Sheets: 10

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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## □ 6. Document ID: US 6197563 B1

L11: Entry 6 of 42

File: USPT

Mar 6, 2001

US-PAT-NO: 6197563  
DOCUMENT-IDENTIFIER: US 6197563 B1

TITLE: Kits for amplifying and detecting nucleic acid sequences

DATE-ISSUED: March 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erlich; Henry A.	Oakland	CA		
Horn; Glenn	Emeryville	CA		
Saiki; Randall K.	Richmond	CA		
Mullis; Kary B.	La Jolla	CA		
Gelfand; David H.	Oakland	CA		

US-CL-CURRENT: 435/194; 435/91.2, 536/23.1

ABSTRACT:

The present invention is directed to a process for amplifying any target nucleic acid sequence contained in a nucleic acid or mixture thereof using a thermostable enzyme. The process comprises treating separate complementary strands of the nucleic acid with a molar excess of two oligonucleotide primers, extending the primers with a thermostable enzyme to form complementary primer extension products which act as templates for synthesizing the desired nucleic acid sequence, and detecting the sequence so amplified. The steps of the reaction can be repeated as often as desired and involve temperature cycling to effect hybridization, promotion of activity of the enzyme, and denaturation of the hybrids formed.

18 Claims, 0 Drawing figures  
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Drawn Desc   Image									KMC

## □ 7. Document ID: US 6183967 B1

L11: Entry 7 of 42

File: USPT

Feb 6, 2001

US-PAT-NO: 6183967  
DOCUMENT-IDENTIFIER: US 6183967 B1

TITLE: Nucleic acid ligand inhibitors to DNA polymerases

DATE-ISSUED: February 6, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jayasena; Sumedha	Boulder	CO		
Gold; Larry	Boulder	CO		

US-CL-CURRENT: 435/6; 435/194, 435/91.2, 536/23.1, 536/25.4

## ABSTRACT:

This invention discloses high-affinity oligonucleotide ligands to the thermostable Taq polymerase, Tth polymerase and TZ05 polymerase. Specifically, this invention discloses DNA ligands having the ability to bind to the Taq, Tth and TZ05 polymerases and the methods for obtaining such ligands. The ligands are capable of inhibiting polymerases at any predetermined temperature.

21 Claims, 82 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 40

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>
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## □ 8. Document ID: US 6140086 A

L11: Entry 8 of 42

File: USPT

Oct 31, 2000

US-PAT-NO: 6140086

DOCUMENT-IDENTIFIER: US 6140086 A

TITLE: Methods and compositions for cloning nucleic acid molecules

DATE-ISSUED: October 31, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fox; Donna K.	Sykesville	MD	21784	
Chatterjee; Deb K.	North Potomac	MD	20878	

US-CL-CURRENT: 435/91.41; 435/184, 435/194, 435/471, 435/91.1, 435/91.2, 435/91.5,  
435/91.52

## ABSTRACT:

The present invention is directed generally to methods facilitating the cloning of nucleic acid molecules. In particular, the invention relates to the use of polymerase inhibitors, including but not limited to anti-polymerase antibodies (such as anti-Taq antibodies) and fragments thereof, to inactivate residual polymerase activity remaining after the amplification (particularly via PCR) of a target nucleic acid molecule. The invention further provides compositions, particularly storage-stable compositions, comprising one or more components, such as one or more restriction endonucleases and one or more polymerase inhibitors, that are useful in cloning amplified or synthesized nucleic acid molecules by the above-described methods. The invention also relates to nucleic acid molecules produced by these methods, and to genetic constructs (such as vectors) and host cells comprising these nucleic acid molecules.

27 Claims, 1 Drawing figures

Exemplary Claim Number: 21

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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## 9. Document ID: US 6096545 A

L11: Entry 9 of 42

File: USPT

Aug 1, 2000

US-PAT-NO: 6096545

DOCUMENT-IDENTIFIER: US 6096545 A

TITLE: Phosphate starvation-inducible proteins

DATE-ISSUED: August 1, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lefebvre; Daniel D.	Kingston			CAX
Malboobi; Mohammed A.	Kingston			CAX

US-CL-CURRENT: 435/410; 435/194, 435/252.33, 435/320.1, 536/23.1, 536/23.2, 536/23.6

## ABSTRACT:

This invention provides proteins, especially protein kinases and glucosidases, which are expressed under conditions of phosphate deprivation. Further provided are nucleic acids and nucleic acid constructs encoding these proteins, cells containing the nucleic acids described and transgenic photosynthetic organisms with altered phosphate-inducible enzyme activity.

25 Claims, 33 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 28

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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## 10. Document ID: US 6063608 A

L11: Entry 10 of 42

File: USPT

May 16, 2000

US-PAT-NO: 6063608

DOCUMENT-IDENTIFIER: US 6063608 A

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: May 16, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/475, 435/69.1, 435/91.1,  
435/91.2, 435/975, 536/23.2

## ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA

Polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

196 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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L11: Entry 11 of 42

File: USPT

Mar 21, 2000

US-PAT-NO: 6040166

DOCUMENT-IDENTIFIER: US 6040166 A

TITLE: Kits for amplifying and detecting nucleic acid sequences, including a probe

DATE-ISSUED: March 21, 2000

## INVENTOR INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erlich; Henry A.	Oakland	CA		
Horn; Glenn	Emeryville	CA		
Saiki; Randall K.	Richmond	CA		
Mullis; Kary B.	La Jolla	CA		
Gelfand; David H.	Oakland	CA		

US-CL-CURRENT: 435/194; 435/6, 435/91.2, 536/23.1

## ABSTRACT:

The present invention is directed to a process for amplifying any target nucleic acid sequence contained in a nucleic acid or mixture thereof using a thermostable enzyme. The process comprises treating separate complementary strands of the nucleic acid with a molar excess of two oligonucleotide primers, extending the primers with a thermostable enzyme to form complementary primer extension products which act as templates for synthesizing the desired nucleic acid sequence, and detecting the sequence so amplified. The steps of the reaction can be repeated as often as desired and involve temperature cycling to effect hybridization, promotion of activity of the enzyme, and denaturation of the hybrids formed.

7 Claims, 0 Drawing figures

Exemplary Claim Number: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>
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 **12. Document ID: US 6020130 A**

L11: Entry 12 of 42

File: USPT

Feb 1, 2000

US-PAT-NO: 6020130

DOCUMENT-IDENTIFIER: US 6020130 A

TITLE: Nucleic acid ligands that bind to and inhibit DNA polymerases

DATE-ISSUED: February 1, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gold; Larry	Boulder	CO		
Javasena; Sumedha	Boulder	CO		

US-CL-CURRENT: 435/6; 435/194, 435/810, 435/91.2, 536/22.1, 536/24.3, 536/25.4

## ABSTRACT:

This invention discloses high-affinity oligonucleotide ligands to the thermostable Taq polymerase and Tth polymerase. Specifically, this invention discloses DNA ligands having the ability to bind to the Taq and Tth polymerases and the methods for obtaining such ligands. The ligands are capable of inhibiting polymerases at ambient temperatures.

17 Claims, 35 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
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 13. Document ID: US 5998195 A

L11: Entry 13 of 42

File: USPT

Dec 7, 1999

US-PAT-NO: 5998195

DOCUMENT-IDENTIFIER: US 5998195 A

TITLE: Highly-purified recombinant reverse transcriptase

DATE-ISSUED: December 7, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kacian; Daniel Louis	San Diego	CA		
Riggs; Michael Garth	San Diego	CA		
Putnam; James Garfield	San Diego	CA		

US-CL-CURRENT: 435/252.33; 435/194, 435/252.3, 536/23.2

## ABSTRACT:

A plasmid for expression of Moloney Murine Leukemia Virus-derived reverse transcriptase in E. coli cells deficient in the expression of indigenous RNase activity, a method for purification of the recombinant enzyme, and a composition comprising a cloned and purified reverse transcriptase optimized for use in cDNA and nucleic acid amplification procedures.

22 Claims, 20 Drawing figures

Exemplary Claim Number: 3

Number of Drawing Sheets: 12

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
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 14. Document ID: US 5935834 A

L11: Entry 14 of 42

File: USPT

Aug 10, 1999

US-PAT-NO: 5935834

DOCUMENT-IDENTIFIER: US 5935834 A

TITLE: Reverse transcriptase composition having improved storage stability

DATE-ISSUED: August 10, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Odawara; Fumitomo	Shizuoka			JPX

US-CL-CURRENT: 435/194; 435/188, 435/193, 435/91.2

## ABSTRACT:

Disclosed is a reverse transcriptase composition having improved storage stability, comprising a reverse transcriptase, an effective stabilizing amount of at least one organic stabilizing reagent selected from trehalose and a nucleic acid containing a transcriptional initiation site recognizable by the enzyme, and an effective stabilizing amount of a metal salt capable of producing bivalent positive ions in an aqueous solution of the metal salt. Also disclosed is a method for improving storage stability of a reverse transcriptase, which comprises adding the above-mentioned organic stabilizing reagent and metal salt to a reverse transcriptase. The composition of the present invention can be stably stored for a prolonged period of time at a temperature up to at least 4.degree. C. Further, by virtue of a relatively high temperature usable for stable storage, the viscosity of the composition can be advantageously maintained at a low level, so that it becomes possible to accurately dispense the composition by a quantity corresponding to a desired enzyme activity, thereby achieving high reproducibility in experiments using the reverse transcriptase. Therefore, in the determination of a virus, in which a reverse transcriptase activity is used as an index, the composition of the present invention can be advantageously used as a standard substance for determining the amount of virus.

17 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
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 15. Document ID: US 5935833 A

L11: Entry 15 of 42

File: USPT

Aug 10, 1999

US-PAT-NO: 5935833

DOCUMENT-IDENTIFIER: US 5935833 A

TITLE: Highly-purified recombinant reverse transcriptase

DATE-ISSUED: August 10, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kacian; Daniel Louis	San Diego	CA		
Riggs; Michael Garth	San Diego	CA		
Putnam; James	San Diego	CA		

US-CL-CURRENT: 435/194; 435/252.33, 536/23.2

## ABSTRACT:

A plasmid for expression of Moloney Murine Leukemia Virus-derived reverse transcriptase in E. coli cells deficient in the expression of indigenous RNase activity, a method for purification of the recombinant enzyme, and a composition comprising a cloned and purified reverse transcriptase optimized for use in cDNA and nucleic acid amplification procedures.

5 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
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16. Document ID: US 5891637 A

L11: Entry 16 of 42

File: USPT

Apr 6, 1999

US-PAT-NO: 5891637

DOCUMENT-IDENTIFIER: US 5891637 A

TITLE: Construction of full length cDNA libraries

DATE-ISSUED: April 6, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ruppert; Siegfried J.W.	San Francisco	CA		

US-CL-CURRENT: 435/6; 435/194, 435/252.33, 435/455, 435/465, 435/476, 435/489, 435/91.2

ABSTRACT:

A method of producing cDNA from mRNA is described in which the 5' end of mRNA is capped and introduced into a vector so that both the 5' and 3' ends become annealed to flanking sequences of the vector. Reverse transcriptase is then used to convert the mRNA into dscDNA, the reverse transcriptase being employed in vivo, in vitro or using a combination of these approaches. Preferably, the conversion of mRNA to dscDNA is carried out in a cell line transformed with a second vector producing the reverse transcriptase, the cell line supplying the other enzymes and materials needed for cDNA synthesis. Also described are applications of this method to construct and screen cDNA libraries and cell lines transformed with both vectors.

35 Claims, 36 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 36

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

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17. Document ID: US 5846532 A

L11: Entry 17 of 42

File: USPT

Dec 8, 1998

US-PAT-NO: 5846532

DOCUMENT-IDENTIFIER: US 5846532 A

TITLE: Method and composition for the treatment of disorders involving immunological dysfunction

DATE-ISSUED: December 8, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kline; Ellis L.	Pendleton	SC		

US-CL-CURRENT: 424/94.6; 424/146.1, 424/184.1, 435/194, 436/506, 436/507, 436/508,  
436/509, 514/12, 514/825

ABSTRACT:

A method and composition are provided for treatment of disorders involving immunological dysfunction. The invention comprises the administration of a low level of ribonucleotide polymerase protein or a derivative thereof to a human or animal with an immune dysfunction disorder.

16 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
<a href="#">Draw Desc</a>   <a href="#">Image</a>										

18. Document ID: US 5834310 A

L11: Entry 18 of 42

File: USPT

Nov 10, 1998

US-PAT-NO: 5834310

DOCUMENT-IDENTIFIER: US 5834310 A

TITLE: Mammalian muscle NAD: arginine ADP-ribosyltransferase

DATE-ISSUED: November 10, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moss; Joel	Bethesda	MD		
Okazaki; Ian	Rockville	MD		
Zolkiewska; Anna	Rockville	MD		
Nightingale; Maria S.	Bethesda	MD		

US-CL-CURRENT: 435/325; 435/193, 435/194, 435/252.3, 435/252.33, 435/320.1, 435/350,  
435/351, 435/352, 435/353, 435/354, 536/23.1, 536/23.2, 536/23.5

ABSTRACT:

This invention relates to the identification and molecular characterization of NAD:arginine ADP-ribosyltransferases. Sequences from the rabbit skeletal muscle NAD:arginine ADP-ribosyltransferase and the human NAD:arginine ADP-ribosyltransferase are provided herein. Recombinant protein is expressed from a recombinant gene vector containing at least 15 continuous bases of genes encoding these sequences.

6 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
<a href="#">Draw Desc</a>   <a href="#">Image</a>										

19. Document ID: US 5834208 A

L11: Entry 19 of 42

File: USPT

Nov 10, 1998

US-PAT-NO: 5834208  
 DOCUMENT-IDENTIFIER: US 5834208 A

TITLE: Tyrosine kinase

DATE-ISSUED: November 10, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sakano; Seiji	Fuji			JPX

US-CL-CURRENT: 435/7.1; 435/194, 435/320.1, 530/350, 536/23.5

## ABSTRACT:

Disclosed are a novel cytoplasmic tyrosine kinase which is increased with respect to expression amount thereof in accordance with the differentiation of blood cells, and a deoxyribonucleic acid (DNA) coding for the same. The tyrosine kinase of the present invention can be advantageously used for screening chemical substances having the capability to inhibit or activate the tyrosine kinase activity of at least the tyrosine kinase of the present invention. Also disclosed are a replicable recombinant DNA molecule comprising a replicable expression vector and, operably inserted in the vector, a DNA coding for the tyrosine kinase of the present invention; a microorganism or animal cells transformed with the replicable recombinant DNA molecule; an antibody reactive with a polypeptide comprising as an immunogen at least part of an amino acid sequence of the tyrosine kinase of the present invention; a sense DNA prepared from the cDNA coding for the tyrosine kinase of the present invention and an anti-sense DNA which is complementary to the sense DNA; and a sense RNA prepared from the cDNA coding for the tyrosine kinase of the present invention and an anti-sense RNA which is complementary to the sense RNA.

5 Claims, 0 Drawing figures

Exemplary Claim Number: 5

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC
Draw Desc		Image								

 20. Document ID: US 5804188 A

L11: Entry 20 of 42

File: USPT

Sep 8, 1998

US-PAT-NO: 5804188  
 DOCUMENT-IDENTIFIER: US 5804188 A

TITLE: Method and composition for treatment of disorders involving immunological dysfunction

DATE-ISSUED: September 8, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kline; Ellis L.	Pendleton	SC		

US-CL-CURRENT: 424/184.1; 424/146.1, 424/94.6, 435/194, 436/506, 436/507, 436/508,  
436/509, 514/2, 514/825

**ABSTRACT:**

A method and composition are provided for treatment of disorders involving immunological dysfunction. The invention comprises the administration of a low level of ribonucleotide polymerase protein or a derivative thereof to a human or animal with an immune dysfunction disorder.

20 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	<a href="#">Image</a>									

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Terms	Documents
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**Display Format:** [REV](#) [Change Format](#)

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**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 21 through 30 of 42 returned.****□ 21. Document ID: US 5744312 A**

L11: Entry 21 of 42

File: USPT

Apr 28, 1998

US-PAT-NO: 5744312

DOCUMENT-IDENTIFIER: US 5744312 A

TITLE: Thermostable DNA polymerase from Thermoanaerobacter thermohydrosulfuricus

DATE-ISSUED: April 28, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mamone; Joseph A.	Parma	OH		
Davis; Maria	Twinsburg	OH		
Sha; Dan	Euclid	OH		

US-CL-CURRENT: 435/6; 435/194, 435/252.3, 435/325, 435/419, 435/91.1, 435/91.2,  
536/23.2

## ABSTRACT:

An enzymatically active DNA polymerase or fragment thereof having at least 80% homology in its amino acid sequence to at least a contiguous 40 amino acid sequence of the DNA polymerase of Thermoanaerobacter thermohydrosulfuricus.

33 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw. Desc	Image									

**□ 22. Document ID: US 5714365 A**

L11: Entry 22 of 42

File: USPT

Feb 3, 1998

US-PAT-NO: 5714365

DOCUMENT-IDENTIFIER: US 5714365 A

TITLE: Sucrose phosphate synthetase isolated from maize

DATE-ISSUED: February 3, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Van Assche; Charles	Marseille			FRX
Lando; Danielle	Paris			FRX
Bruneau; Jean Michel	Paris			FRX
Voelker; Toni Alois	Davis	CA		
Gervais; Monica	Saint-Leu-la-Foret			FRX

US-CL-CURRENT: 435/194; 435/100, 436/548

**ABSTRACT:**

A protein having sucrose phosphate synthetase (SPS) activity is isolated from plants, preferably maize. The protein has a molecular weight of 110-130 dK and contains at least one peptide selected from Thv Trp Ile Lys, Try Val Val Glu Leu Ala Arg, Ser Met Pro Pro Ile Trp Ala Glu Val Met Arg, Leu Arg Pro Asp Gln Asp Try Leu Met His Ile Ser His Arg and Trp Ser His Asp Gly Ala Arg. Isolation is carried out by obtaining an extract from the plant by grinding, centrifugation and filtration; enriching the extract in SPS protein by precipitation in an appropriate solvent such as polyethylene glycol, centrifugation and solubilization of the precipitate obtained in a buffer solution; subjecting the protein thus obtained to low pressure anion exchange chromatography, chromatography on heparin Sepharose and high pressure anion exchange chromatography; and purifying the active fractions obtained by passage through two high pressure chromatography columns. Hybridomas and monoclonal antibodies are prepared from an antigen resulting from high pressure anion exchange chromatography above, antibodies directed specifically against SPS are selected and the antibodies are used to purify the SPS obtained previously. Complementary DNA coding for the SPS is prepared and used to modify expression of the SPS in plant cells.

2 Claims, 18 Drawing figures

Exemplary Claim Number: 2

Number of Drawing Sheets: 16

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
<a href="#">Draw Desc</a>	<a href="#">Image</a>									

23. Document ID: US 5668005 A

L11: Entry 23 of 42

File: USPT

Sep 16, 1997

US-PAT-NO: 5668005

DOCUMENT-IDENTIFIER: US 5668005 A

TITLE: Cloned genes encoding reverse transcriptase lacking RNASE H activity

DATE-ISSUED: September 16, 1997

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael Leslie	Columbia	MD		
Gerard; Gary Floyd	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.3, 435/252.33, 435/320.1, 435/69.1, 435/69.7, 435/810,  
435/91.51, 536/23.2, 536/23.4

**ABSTRACT:**

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse

transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

37 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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## 24. Document ID: US 5614365 A

L11: Entry 24 of 42

File: USPT

Mar 25, 1997

US-PAT-NO: 5614365

DOCUMENT-IDENTIFIER: US 5614365 A

TITLE: DNA polymerase having modified nucleotide binding site for DNA sequencing

DATE-ISSUED: March 25, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles	Chestnut Hill	MA		

US-CL-CURRENT: 435/6; 435/194, 435/195, 435/488, 435/69.1, 435/91.1, 435/91.2, 530/350, 536/23.1, 536/23.2

ABSTRACT:

Modified gene encoding a modified DNA polymerase wherein the modified polymerase incorporates dideoxynucleotides at least 20-fold better compared to the corresponding deoxynucleotides as compared with the corresponding naturally-occurring DNA polymerase.

108 Claims, 6 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								KM/C

## 25. Document ID: US 5604099 A

L11: Entry 25 of 42

File: USPT

Feb 18, 1997

US-PAT-NO: 5604099

DOCUMENT-IDENTIFIER: US 5604099 A

TITLE: Process for detecting specific nucleotide variations and genetic polymorphisms present in nucleic acids

DATE-ISSUED: February 18, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erlich; Henry A.	Oakland	CA		
Horn; Glenn	Emeryville	CA		
Saiki; Randall K.	Richmond	CA		
Mullis; Kary B.	Kensington	CA		

US-CL-CURRENT: 435/6; 435/194, 435/91.2, 435/91.21, 536/24:3, 536/24.33

**ABSTRACT:**

Single or multiple nucleotide variations in nucleic acid sequence can be detected in nucleic acids by a process whereby the sample suspected of containing the relevant nucleic acid is repeatedly treated with primers, nucleotide triphosphates, and an agent for polymerization of the triphosphates and then denatured, in a process which amplifies the sequence containing the nucleotide variation if it is present. In one embodiment, the sample is spotted on a membrane and treated with a labeled sequence-specific oligonucleotide probe. Hybridization of the probe to the sample is detected by the label on the probe.

32 Claims, 0 Drawing figures

Exemplary Claim Number: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
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26. Document ID: US 5576177 A

L11: Entry 26 of 42

File: USPT

Nov 19, 1996

US-PAT-NO: 5576177

DOCUMENT-IDENTIFIER: US 5576177 A

TITLE: Bioassay for reverse transcriptase inhibitors

DATE-ISSUED: November 19, 1996

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Fridland; Arnold	Memphis	TN		
Robbins; Brian L.	Memphis	TN		

US-CL-CURRENT: 435/5; 435/183, 435/194, 435/6, 435/91.51, 436/63

**ABSTRACT:**

The present invention relates generally to methods and kits for determining the bodily level of a reverse transcriptase inhibitor or, therapeutic compound or metabolite thereof used to treat retrovirus infection, particularly HIV 1 infection.

17 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
<a href="#">Draw Desc</a>   <a href="#">Image</a>										

27. Document ID: US 5491086 A

L11: Entry 27 of 42

File: USPT

Feb 13, 1996

US-PAT-NO: 5491086

DOCUMENT-IDENTIFIER: US 5491086 A

TITLE: Purified thermostable nucleic acid polymerase and DNA coding sequences from pyrodictium species

DATE-ISSUED: February 13, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gelfand; David H.	Oakland	CA		
Wang; Alice M.	Lafayette	CA		

US-CL-CURRENT: 435/194; 435/252.3, 435/320.1, 536/23.2, 536/23.7, 930/240

## ABSTRACT:

Recombinant DNA sequences encoding the DNA polymerase activity of Pyrodictium species can be used to construct recombinant vectors and transformed host cells for production of the activity. Pyrodictium enzymes for catalyzing 3'.fwdarw.5' exonuclease activity, i.e., proofreading enzymes, are also provided. The Pyrodictium enzymes are useful in DNA amplification procedures and are not irreversibly inactivated by exposure to 100.degree. C. in a polymerase chain reaction.

20 Claims, 0 Drawing figures

Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc	Image									

 28. Document ID: US 5468613 A

L11: Entry 28 of 42

File: USPT

Nov 21, 1995

US-PAT-NO: 5468613

DOCUMENT-IDENTIFIER: US 5468613 A

TITLE: Process for detecting specific nucleotide variations and genetic polymorphisms present in nucleic acids

DATE-ISSUED: November 21, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erlich; Henry A.	Oakland	CA		
Horn; Glenn	Emeryville	CA		
Saiki; Randall K.	Richmond	CA		
Mullis; Kary B.	Kensington	CA		

US-CL-CURRENT: 435/6; 435/194, 435/91.2, 435/91.21, 536/24.3, 536/24.33

## ABSTRACT:

Single or multiple nucleotide variations in nucleic acid sequence can be detected in nucleic acids by a process whereby the sample suspected of containing the relevant nucleic acid is repeatedly treated with primers, nucleotide triphosphates, and an agent for polymerization of the triphosphates and then denatured, in a process which amplifies the sequence containing the nucleotide variation if it is present. In one

embodiment, the sample is spotted on a membrane and treated with a labeled sequence-specific oligonucleotide probe. Hybridization of the probe to the sample is detected by the label on the probe.

32 Claims, 0 Drawing figures  
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc		Image							

KMC

29. Document ID: US 5434070 A

L11: Entry 29 of 42

File: USPT

Jul 18, 1995

US-PAT-NO: 5434070

DOCUMENT-IDENTIFIER: US 5434070 A

TITLE: Reverse transcriptases from Escherichia coli and Myxococcus xanthus

DATE-ISSUED: July 18, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Inouye; Sumiko	Bridgewater	NJ		
Inouye; Masayori	Bridgewater	NJ		

US-CL-CURRENT: 435/194; 536/23.2, 536/25.2

## ABSTRACT:

The common conserved structural features of msDNAs are described. A synthesis of msDNAs is described which involves a necessary reverse transcriptase. Reverse transcriptases are described which have unique properties in the synthesis of cDNAs. Various utilities are described.

7 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 21

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc		Image							

KMC

30. Document ID: US 5405776 A

L11: Entry 30 of 42

File: USPT

Apr 11, 1995

US-PAT-NO: 5405776

DOCUMENT-IDENTIFIER: US 5405776 A

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: April 11, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael L.	Columbia	MD		
Gerard; Gary F.	Frederick	MD		

US-CL-CURRENT: 435/194, 435/252.3, 435/252.33, 435/320.1, 435/69.1, 435/69.7, 536/23.2,  
536/23.4, 536/23.72

**ABSTRACT:**

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

9 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>
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**WEST****Search Results - Record(s) 31 through 40 of 42 returned.** **31. Document ID: US 5320958 A**

L11: Entry 31 of 42

File: USPT

Jun 14, 1994

US-PAT-NO: 5320958

DOCUMENT-IDENTIFIER: US 5320958 A

TITLE: Isolated bacterial reverse transcriptase

DATE-ISSUED: June 14, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Inouye; Sumiko	Bridgewater	NJ		
Hsu; Mei-Yin	North Plainfield	NJ		
Eagle; Susan	South Amboy	NJ		
Inouye; Masayori	Bridgewater	NJ		

US-CL-CURRENT: 435/194; 435/252.1, 435/822

## ABSTRACT:

The present invention relates to an isolated bacterial reverse transcriptase. The reverse transcriptase synthesizes a peculiar RNA-DNA complex called msDNA which is a single-stranded DNA structure branched out from an RNA molecule. The gene coding for the reverse transcriptase has been isolated and sequenced. It codes for a polypeptide of 485 amino acid residues. This is the first time that a reverse transcriptase has been found, identified and isolated from a prokaryotic microorganism of which the amino acid sequence is shown in FIGS. 2a-2d.

2 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
Draw Desc	Image									

 **32. Document ID: US 5268274 A**

L11: Entry 32 of 42

File: USPT

Dec 7, 1993

US-PAT-NO: 5268274

DOCUMENT-IDENTIFIER: US 5268274 A

TITLE: Methods and nucleic acid sequences for the expression of the cellulose synthase operon

DATE-ISSUED: December 7, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ben-Bassat; Arie	Walnut Creek	CA		
Calhoon; Roger D.	Concord	CA		
Fear; Anna L.	Oakland	CA		
Gelfand; David H.	Oakland	CA		
Meade; James H.	Pinole	CA		
Tal; Rony	Richmond	CA		
Wong; Hing	San Ramon	CA		
Benziman; Moshe	Jerusalem			ILX

US-CL-CURRENT: 435/69.1; 435/101, 435/194, 435/252.3, 435/252.33, 435/320.1, 435/823,  
536/23.2

**ABSTRACT:**

Nucleic acid sequences encoding the bacterial cellulose synthase operon derived from Acetobacter are disclosed. Methods for isolating the genes, vectors containing the genes, and transformed hosts useful for the expression of recombinant bacterial cellulose synthase or production of cellulose are also described.

53 Claims, 15 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 26

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

33. Document ID: US 5266466 A

L11: Entry 33 of 42

File: USPT

Nov 30, 1993

US-PAT-NO: 5266466

DOCUMENT-IDENTIFIER: US 5266466 A

TITLE: Method of using T7 DNA polymerase to label the 3' end of a DNA molecule

DATE-ISSUED: November 30, 1993

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles C.	Chestnut Hill	MA		

US-CL-CURRENT: 435/91.5; 435/194, 435/6

**ABSTRACT:**

This invention relates to T7-type DNA polymerases and methods for using them.

1 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

## □ 34. Document ID: US 5244797 A

L11: Entry 34 of 42

File: USPT

Sep 14, 1993

US-PAT-NO: 5244797

DOCUMENT-IDENTIFIER: US 5244797 A

TITLE: Cloned genes encoding reverse transcriptase lacking RNase H activity

DATE-ISSUED: September 14, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kotewicz; Michael L.	Columbia	MD		
Gerard; Gary F.	Frederick	MD		

US-CL-CURRENT: 435/194; 435/252.33, 435/320.1, 435/69.7, 536/23.2, 536/23.4

## ABSTRACT:

The invention relates to a gene which encodes reverse transcriptase having DNA polymerase activity and substantially no RNase H activity. The invention also relates to vectors containing the gene and hosts transformed with the vectors of the invention. The invention also relates to a method of producing reverse transcriptase having DNA polymerase activity and substantially no RNase H activity by expressing the reverse transcriptase genes of the present invention in a host. The invention also relates to a method of producing cDNA from mRNA using the reverse transcriptase of the invention. The invention also relates to a kit for the preparation of cDNA from mRNA comprising the reverse transcriptase of the invention.

4 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#" style="float: right;">KWD</a>
<a href="#">Draw Desc</a>	<a href="#">Image</a>									

## □ 35. Document ID: US 5243039 A

L11: Entry 35 of 42

File: USPT

Sep 7, 1993

US-PAT-NO: 5243039

DOCUMENT-IDENTIFIER: US 5243039 A

TITLE: Bacillus MGA3 aspartokinase II gene

DATE-ISSUED: September 7, 1993

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schendel; Frederick J.	Oakdale	MN		
Flickinger; Michael C.	St. Paul	MN		

US-CL-CURRENT: 536/23.2; 435/193, 435/194, 435/252.3

## ABSTRACT:

The present invention provides the isolated DNA sequence encoding the .alpha.B dimer subunit of the lysine-sensitive aspartokinase II isozyme from the thermophilic methylotrophic *Bacillus* sp. MGA3.

2 Claims, 3 Drawing figures  
 Exemplary Claim Number: 1  
 Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
<a href="#">Draw Desc</a>   <a href="#">Image</a>										

36. Document ID: US 5145776 A

L11: Entry 36 of 42

File: USPT

Sep 8, 1992

US-PAT-NO: 5145776

DOCUMENT-IDENTIFIER: US 5145776 A

TITLE: Method of using T7 DNA polymerase to mutagenize and fill-in DNA

DATE-ISSUED: September 8, 1992

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles C.	Chestnut Hill	MA		

US-CL-CURRENT: 435/91.5; 435/194, 435/6

## ABSTRACT:

Methods for producing blunt-ended double stranded DNA, for labelling the 3'-end of a DNA fragment, and for in vitro mutagenesis of a DNA fragment. A processive DNA polymerase is used in each method.

9 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC
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37. Document ID: US 5001050 A

L11: Entry 37 of 42

File: USPT

Mar 19, 1991

US-PAT-NO: 5001050

DOCUMENT-IDENTIFIER: US 5001050 A

TITLE: PH.phi.29 DNA polymerase

DATE-ISSUED: March 19, 1991

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Blanco; Luis	Madrid			ESX
Bernad; Antonio	Madrid			ESX
Salas; Margarita	Madrid			ESX

US-CL-CURRENT: 435/5; 435/183, 435/194, 435/6, 435/91.2, 435/91.5, 436/501, 436/93

**ABSTRACT:**

An improved method for determining the nucleotide base sequence of a DNA molecule. The method includes annealing the DNA molecule with a primer molecule able to hybridize to the DNA molecule; incubating the annealed mixture in a vessel containing four different deoxynucleoside triphosphates, a DNA polymerase, and one or more DNA synthesis terminating agents which terminate DNA synthesis at a specific nucleotide base, wherein each the agent terminates DNA synthesis at a different nucleotide base; and separating the DNA products of the incubating reaction according to size, whereby at least a part of the nucleotide base sequence of the DNA can be determined. The improvement is provision of a DNA-polymerase which is a .phi.29-type DNA polymerase.

20 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC

**□ 38. Document ID: US 4946786 A**

L11: Entry 38 of 42

File: USPT

Aug 7, 1990

US-PAT-NO: 4946786

DOCUMENT-IDENTIFIER: US 4946786 A

TITLE: T7 DNA polymerase

DATE-ISSUED: August 7, 1990

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles C.	Chestnut Hill	MA		

US-CL-CURRENT: 435/194; 435/252.33, 435/320.1

**ABSTRACT:**

Method for production of a composition consisting essentially of a T7-type DNA polymerase and thioredoxin. The method includes culturing a cell containing plasmid DNA encoding a T7-type DNA polymerase to express the T7-type DNA polymerase from the plasmid DNA, and purifying the T7-type DNA polymerase expressed from the cell to reduce the exonuclease activity associated with the T7-type DNA polymerase compared to the level of exonuclease activity associated with a corresponding naturally-occurring T7-type DNA polymerase.

18 Claims, 22 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC

**□ 39. Document ID: US 4943531 A**

L11: Entry 39 of 42

File: USPT

Jul 24, 1990

US-PAT-NO: 4943531

DOCUMENT-IDENTIFIER: US 4943531 A

TITLE: Expression of enzymatically active reverse transcriptase

DATE-ISSUED: July 24, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goff; Stephen P.	Tenafly	NJ		
Tanese; Naoko	New York	NY		
Roth; Monica J.	Bronx	NY		

US-CL-CURRENT: 435/194; 435/252.33, 435/320.1

## ABSTRACT:

This invention provides a plasmic which, when introduced into a suitable host cell and grown under appropriate conditions, effects expression of a gene on the plasmid and production of a polypeptide having reverse transcriptase activity. The plasmid is a double-stranded DNA molecule which includes in a 5' to 3' order the following: a DNA sequence which includes an inducible promoter; a DNA sequence which includes an ATG initiation codon; the central portion of the Moloney murine leukemia virus (MuLV) pol gene, said central portion including a DNA sequence which encodes the polypeptide having reverse transcriptase activity; a DNA sequence which contains a gene associated with a selectable or identifiable phenotypic trait which is manifested when the vector is present in the host cell; and a DNA sequence which contains an origin of replication from a bacterial plasmid capable of autonomous replication in the host cell.

The invention also concerns a method for recovering purified enzymatically-active polypeptide having reverse transcriptase activity, the polypeptide being encoded by the plasmid pB6 B15.23, from a suitable host cell e.g., E. coli HB101 producing the polypeptide. Finally, the invention concerns use of the polypeptide to prepare complementary DNA (cDNA).

3 Claims, 5 Drawing figures

Exemplary Claim Number: 3

Number of Drawing Sheets: 5

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 40. Document ID: US 4942130 A

L11: Entry 40 of 42

File: USPT

Jul 17, 1990

US-PAT-NO: 4942130

DOCUMENT-IDENTIFIER: US 4942130 A

TITLE: T7 DNA polymerase

DATE-ISSUED: July 17, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles C.	Chestnut Hill	MA		

US-CL-CURRENT: 435/194; 435/849, 536/23.2

27 Claims, 10 Drawing figures

Exemplary Claim Number: 1  
Number of Drawing Sheets: 19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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L11: Entry 41 of 42

File: USPT

May 1, 1990

US-PAT-NO: 4921794

DOCUMENT-IDENTIFIER: US 4921794 A

TITLE: T7 DNA polymerase

DATE-ISSUED: May 1, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tabor; Stanley	Cambridge	MA		
Richardson; Charles C.	Chestnut Hill	MA		

US-CL-CURRENT: 435/91.2; 435/194, 435/320.1, 536/23.1, 536/24.33

## ABSTRACT:

This invention relates to T7-type DNA polymerases and methods for amplification of DNA, for example by polymerase chain reaction.

24 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
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 **42. Document ID: US 4224408 A**

L11: Entry 42 of 42

File: USPT

Sep 23, 1980

US-PAT-NO: 4224408

DOCUMENT-IDENTIFIER: US 4224408 A

TITLE: Deoxyribonucleic acid synthesis using binding protein

DATE-ISSUED: September 23, 1980

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hung; Paul P.	Waukegan	IL		
Lee; Shaw-guang	Libertyville	IL		

US-CL-CURRENT: 435/91.51; 435/194

## ABSTRACT:

Record List Display

Described is a method of obtaining complete copying of the entire length of single stranded ribonucleic acid (RNA) into its complementary deoxyribonucleic acid (cDNA) by reverse transcription using binding protein. The method can be used in recombinant DNA research to copy total messenger RNA into DNA.

2 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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